AUG -7 1925

4

Index to Volume LIV

702
2844
19

JANUARY TO JUNE

1925

Electrical West

Journal of Electricity

Published by McGraw-Hill Company of California
San Francisco, California

AUTHORS' INDEX

	Page
Allen, Ben S.	518
*Barnard, H. C.	280
Barker, George W.	361
Bartlett, John T.	64
*Berry, J. U.	58
Bray, John	179
*Beckett, E. J.	43, 594
*Brooks, M. J.	48
*Browne, Earl E.	328
Brown, F. A.	430
Bullis, S. M.	433
Buswell, J. M.	498
Chapman, Paul E.	451
Cox, H. H.	459, 498
*Crawford, E. J.	329
*Cummings, M. L., Jr.	10
*Cobb, John N.	50
*Conrad, E. S.	252
*Cooper, H. W.	313
Cyr, W. A.	514
*Day, Alva L.	287
Denny, R. C.	470, 478, 490
Deppe, J. T.	390
Dexter, B. D.	464, 469, 486, 495
*Duruz, W. P.	129
Dyer, L. L.	463, 464, 466, 499
Ealson, E. A.	440
*Earl, Guy C.	5
*Fagan, F. D.	204
*Fairbank, J. P.	12
*Foster, W. C.	104
*Frost, A. M.	351
*Fuller, L. B.	123
Galusha, D. L.	576
Gaylord, J. C.	499
Gilcrist, C. F.	442
*Glasgow, A. S.	288
Green, Sydney W.	519
Griffith, Franklin T.	543
*Hawkins, J. G.	282
Hawley, George N.	108
*Henry, Kenneth M.	356
Hinson, N. B.	436
Hughes, V. R.	430
*Hungerford, James Edward	107
*Hunt, Lloyd F.	210
Jordan, J. Charles	511
Joy, Al. C.	512
Kalb, H. N.	493
Kellogg, R. B.	486
Kendall, E. J.	428
Kennely, D. J.	492
Kenney, C. B.	215
*Kimball, G. E.	291
Laidlaw, H. A.	498
Landon, J. L.	488
Lane, H. S.	471, 495
Lewelling, Raymond	449
Likely, R. D.	466
Lindblad, W. N.	441
Long, C. C.	463, 464
*Lovell, T. J.	286
Lynn, H. Kay	220
MacFarlane, D. D.	390
Martindale, Roy	488
*Mason, D. P.	134, 374
*Mayer, F. H.	54, 492
McKay, Richard	364
*Mitchell, F. V.	20, 60
McGlashan, H. D.	46
Minor, H. S.	460, 469
Mordoff, Charles E.	426
*Moses, B. D.	129, 581
Myrtle, Frederick S.	513
Osler, Joe	27, 219
Otterson, John W.	591
Paget, J. H.	441
Peirson, Charles Heston	516
Price, Walter F.	139
Putnam, W. R.	589
Rice, H. C.	389
Richmond, W. E.	367
Rollow, J. G.	576
*Ryan, W. T.	57
Sadler, E. K.	480
Sampson, H. L.	492, 499
Scanlon, M. W.	515
Shaw, W. D.	544
Smith, W. L.	431
*Spencer, Walter	138
Spring, A. L.	389
*Stauffacher, E. R.	199, 466, 471
Strauch, A.	243
Sutcliffe, H. T.	464, 469, 471, 486, 495
*Tallant, C. H.	316
Tenney, George C.	581
*Thomas, F. P.	142
Thomas, G. L.	311
*Tice, H. W.	275
*Turnbull, Ray W.	166
Vincent, W. G., Jr.	563
*Vivian, Chauncey H.	359
Whitney, E. F.	586
Wilkins, R. W.	464, 471, 473
Williamson, B. A.	367

TK1 ,E495

Index to Volume LIV

Illustrated articles are designated by an asterisk (*), editorials by a dagger (†).

A

A.A.E. Held in Provo, May 2, Annual Convention Utah — 540
Aberdeen, Wash—
*First Electric Home in—Gives Dealers an opportunity to display electrical equipment — 142
Employs Skagit Engineer — 375
*Abou Mohammed Broadcasts Some Success Slogans — 219
†Accident Prevention, Importance of — 78
Accident Prevention, Company Organization for — 428
Accident Prevention Course for Linemen — 430
Achievements and Responsibilities of "Customer-Ownership" — 594
Activities of the Women Within the Organization — 534
†Adequate Wiring Standards and the Red Seal Plan — 348
Advertising Must Sell — 519
Advertising and Publicity—Comparative Values of — 513
Aerial Photography Published, Booklet on — 334
*Age Limits and Physical Examination of Employees — 237
†Age of Progress, This is an — 121
Agency Plan Adopted for Disposal of Hetch Hetchy Power — 294
Agricultural Pumping Plants, Testing Service for — 410
*Agricultural Wiring Conditions Show Notable Improvement — 61
A.I.E.E. — 35, 69
Nominations Announced — 267
Elects Officers — 597
Alameda County Association of Contractor-Dealers Meets — 188
*Alhambra to Install New Street Illuminating System — 336
Alleged Electrical Monopoly is to Be Investigated — 146
Aluminate Cement Coming Into Production in U.S. — 176
*America's Highest-Head Hydro Plant to be Built on Kings River — 241
American Association of Engineers — 35
*American Express Buys Electric Trucks for Oakland — 31
Anacortes Property is Purchased by Puget Sound Company — 28
Analysis of Domestic Metered Water Heating in California — 397
*Annealing Glass with the Electric Lehr — 356
Annual Convention Utah A.A.E. in Provo, May 2 — 540
Annual Inventories of Material and Equipment — 527
Annual Reports of Six Electric Utilities are Presented to Stockholders — 376
†Another Triumph for the West — 41
Appeal Filed by Edison Company in Water Rights Suit — 600
Appliance Operating Cost Question — 24
Appliance Companies Abandon Plans for Merger — 110
†Appliances That Lie on the Shelf, Tra-La, Have Something to do with the Case — 195
†Application of Portable Motors for Orchard Spray Pumps — 234
Application for Cowlitz County Hydro Project Filed — 223
Applications for N.E.L.A. Hotel Reservations to be Mailed — 189
Application Filed for Appropriation of Water from Feather River North Fork Tributaries — 375
Applications Filed on Western Washington Power Sites — 224
Application Filed for Water Appropriation for East Bay Municipal Utility District Water-Supply Project — 150
Appliances—
†"Cheap Appliances Are a Serious Menace" — 119
Selling Appliances for Use Every Day in the Year — 26
Prices Clearly Shown on Tags Help Appliance Sales — 61
Piece of Black Velvet Helps in Appliance Sales — 61
Selling $22 Worth of Appliances to Each Lighting Customer — 170
†Periodic Inspection of Domestic Appliances — 120
Dealer's Plan for Selling Small — 390
*Architect Has Complete Electric Home Built for Himself — 255
Arizona Asks Water Parley — 150
Associated Manufacturers of Electrical Supplies to Meet in June — 260
Attendance Shows Nela Lighting Courses Popular — 229
Auction of Colorado Springs Utility June 22 — 597
Automatic— Page
Regulator Head, Design of — 488
Generating Plant Design and Operation, Some Features of — 490
Substations, Design and Operation Features of — 486
Substations on San Joaquin and Affiliated Systems — 480
Substation in Seattle Installed — 30

B

Baker River—
Hydro Plant Equipment, Orders Placed — 184
*Pressure Tunnel Nears Completion — 248
Project, Progress on — 224
*Banks — 22
Bank Rating Increased 50 Per Cent by Water Spray — 250
*Battery Charging Outfit Installed by Los Angeles Store — 253
B.C. Company May Extend Transmission System to Serve Vancouver Island Cities — 260
†Beautification of Properties as a Phase of Public Relations — 347
Better Customer Relations Through Our Employees — 390
Better Home Lighting Contest, Following Up the National — 408
Better Homes Week During Month of May, To Observe — 262
Better Lighting—
Contest — 69
*Demonstrating the Advantages of — 220
Teaching the Fundamentals of — 284, 407
School in Oakland Feb. 2-13, To Hold — 115
*Better Merchandising— 24, 62, 142, 182, 218, 256, 332, 372
Big Creek—
Hydroelectric Construction and Progress to Meet Growing Power Demand — 544
*No. 1 — 550
Project, Engineer Suggests Naming Some Phase of Big Creek Project for John S. Eastwood — 273
Edison Company to Build Third 220-kv. Big Creek Line — 597
No. 1 Unit is Shipped, Fourth — 598
New Unit at No. 2 Placed in Operation — 297
*No. 2 Power House Being Extended 56 ft. — 212
Bill Proposed for Conservation in Watershed Counties — 110
Bone Power Bill Being Prepared, Substitute for — 66
†Book Profits and Bank Balance — 1
Book on Political Ownership is Published by N.E.L.A. — 335
Booklet on Aerial Photography Published — 334
Book Reviews —
Applied Electricity for Practical Men, by Arthur J. Rowland — 190
Circuit Troubles and Testing, by Terrell Croft — 228
Electrical Engineering, by Alexander Gray — 152
Electrical Drafting and Design, by Calvin C. Bishop — 342
Electrical Measurement in Theory and Practice, by Arthur Whitemore Smith — 304
Industrial Electricity, by Chester L. Dawes — 266
Principles of Merchandising, by Melvin T. Copeland — 34
Substation Operation, by Edwin Kurtz — 114
Standard Electrical Dictionary, by T. O'Connor Sloane — 266
Telephone Circuit Diagrams, by John M. Heath — 382
Bridge River May Be Developed by B.C. Electric Company — 150
Brigham City Men Make Visit to Cutler Power Plant Site — 343
British Columbia Electric Railway Co., Ltd. †39, *62, 67, 82, *83, 92, 150, †158, *198, — 260
Bronze Tablet Erected in Honor of Thomas A. Edison — 603
Budget for 1925 is Announced by San Diego Company — 185
Budget, Five Western Utilities Share in $22,948,000 — 261
Bureau of Power and Light, Los Angeles — 499
Bureau Activities at Fresno Meetings Reviewed in Brief by Chairman — 299
Burlingame Adopts Electrical Rules in Effect in Oakland — 291
*Bushing Current Transformer Standards Adopted — 286
Byllesby Interests Buy Natrona Power Company — 341

C

Cable-Splicing Instruction — 451
Cafe in Utility's Former Home, Electrically Equipped — 141
California— Page
Adopts Six-State Pact with Reservations — 297
†Cooperative Campaign Now California Electrical Bureau — 159
Dairy Farm and Electricity — 408
Electrical Bureau Advisory Board to Meet — 305
Electrical Bureau Advisory Board Meets — 258, 380
Electrical Bureau Presents Annual Report — 262
Electragists to Hold Quarterly Meeting in Visalia — 263
State-Wide Electragists Society Formed — 263
Electrical Bureau Organization Changed — 603
Plans Progress for One Body of Electragists — 227
Electrical Bureau to Replace "Coop. Camp" — 146
Mountain Snow Pack Much Above Last Year's — 223
Displaced by New York in Electricity Generation — 375
Electrical Construction Company — 188
*High School Exhibits Electrical Home — 182
Institute of Technology Conducts Strength Tests — 374
Utility Construction Program — 224
California Electragists—
Have Successful Quarterly Meeting at Visalia — 381
Advantages of Membership in the — 139
Quarterly Meeting at Sacramento — 189
To Hold Quarterly Meeting — 73
Plans for Visalia Meeting — 304
Quarterly Meeting at Sacramento — 114
Californians are Appointed to National Committees — 265
*California Oregon Power Co. *18, *84, *85, *98, 110, *556
*Card System Used for Protective Equipment Records — 56
†Cat and Telephone Pole — 349
†Cat Swiches Tail and Lo Power Quits — 197
*Central Station Construction Operation and Maintenance— *16, *54, 104, *134, *174, *210, *248, *324, *364
Central Station—
A Suggested Merchandising Plan for — 389
Manufacturer Prepares Displays for — 602
And Electric Transportation — 417
Load-Building Appliance Campaign — 243
Chain of Utilities is Formed in Rocky Mountain Region — 375
Changes in Tacoma Distribution System Contemplated — 379
Changes Made in the National Electrical Safety Code — 293
†"Cheap" Appliances are a Serious Menace — 119
City of Eugene, Ore., Files on Power Site — 600
City of Aberdeen Fails to Get Legislature to Act — 184
†Closer Understanding Between Various Departments is Needed — 119
Coast Valleys Gas & Electric Company — 261
Code of Safety Rules and Safe Practices — 430
*Color Flood-Lighting, Commercial Possibilities of — 351
Colorado River—
Investigation Bonds Voted by Los Angeles — 601
River Basin Surveys Supply Valuable Data — 33
Seek Six-State Colorado River Compact Ratification — 222
Senate of Arizona Rejects the Compact — 223
Waterworks Plan on Los Angeles Ballot — 535
Legislatures Discuss Approval of Pact — 259
†Congressional Excursion to the Colorado River, Another — 196
Consider International Aspects of River Development — 226
Colorado Springs Utility to be Sold at Auction June 22 — 597
Colorado—
Legislature Considers Adequate Lighting Bill — 224
Public Service Association — 32
Minimum Lighting Bill Not Passed by Senate — 335
Commercial—
National Section Review of Activities — 589
*Possibilities of Color Flood-Lighting — 351
Programs Discussed at Jobbers' Meeting — 153
*Activity—A Resume and a Forecast — 91
Committee Chairmen Named for San Diego Electric Club — 191
Company Organizations for Accident Prevention — 428
Comparative—
Costs of Operating a Gas and an Electric Apartment — 247
*Costs of Steam and Electric Operation of the C.M.& St.P. Railway — 207

Page

Values of Advertising and Publicity..... 513
†Complete Electrification Should Begin at Home 157
Concrete-Filled Gas Pipe Used for Trestle Supports 17
†Congratulations Due the Contractor-Dealers of California 233
Conservation in Watershed Counties, Bill is Proposed for 110
Construction—
Pit 4 Plant to Be Started in 1925..... 73
Shasta Station to Be Started in May.... 110
*13-Mile Florence Lake Tunnel Sets Many Records 161
Start on Feather River Power Development Project 334
*Continuous Roller Map Mounting Handy for Substation 137
Contract—
Increased 65 Per Cent by Electrical Bureau 293
Tacoma Substation is Awarded..... 112
Largest Turbines and Generators Signed 375
†Contractor—
Is Outlet of Electrical Reservoir..... 347
*Makes Electrically Heated Water-Boiler 369
Make Valuable Use of Membership Lists 370
Interested in Electrical Safety Orders.. 291
Contractor-Dealers—
†Of California, Congratulations Due the 233
Association Holds Annual Banquet..... 114
Convenience Outlets for Store Window Display 23
*Convenience Outlets, Cooperative Plan Helps to Sell 109
Convention Plans, Guests' Entertainment Provided in 535
*Cooking Schools 166
†Cooperative Campaign Depends Upon Present Stand of Industry, Future of..... 121
*Cooperative Plan Helps to Sell Convenience Outlets 109
†Cooperation, Not Price-Fixing Boosts Sales 79
*Copco Forum Holds Third Annual Christmas Party 148
Corona Discharge Mechanism and Characteristics Discussed 379
Corporation Formed to Distribute Ohio Vacuum Cleaners 259
Correction of Error in "Smiles" Contest Report 113
Cost of Valuation of Utilities Estimated at $130,000 112
†Court Decision Affects Future Water-Storage Projects in California 158
Court Decision Affects Edison Company's Big Creek Project 185
Court Denies Condemnation Right for Transmission Line 229
Court Sustains Idaho Company in Complaint Filing 30
†Courtesy Discount 1
Cowlitz County Hydro Project Filed, Application for 223
Cramp Company to Build Turbines for Cutler Plant 68
Creation of Three New Sales Divisions Announced by National Lamp Works..... 369
*Cross-Word Puzzle—Contributed by Engineer *22, *61
*Current Transformers, Simple Rule for Connecting 210
Curtis Lighting Announces New Merchandising Policy 224
Cushman Project 33, 150
Cushman No. 1 Transmission Line, Request Bids for 150
"Customer-Ownership," Some Achievements and Responsibilities of 594
*Customer-Ownership from the Standpoint of the Utility Customer..... 43
Customer Relations Through Our Employees, Better 390
Customers, Proper Treatment of Our..... 393
Cutler Power Plant Site Visited by Brigham City Men 343

D

Date of Southwestern Convention Changed 267
Dealer—
Carries His Store to His Customer's Homes 60
Home Lighting Campaign Planned by Westinghouse 602
Who Shall Pay for Dealer Helps..... 515
*Display World's Largest Reproductions of Irons 598
Plan for Selling Small Appliances..... 390
*Death Ends Brilliant Career of James A. Lighthipe 295
†Debasement of the Title "Engineer"..... 40
Definition of Engineer 17
Demand Factor in Heating and Cooking Loads 329
*Demonstrate Electrical Devices in Modern Home 142
*Demonstrating the Advantages of Better Light 220
Denver—
Broadcasting Station Goes on the Air 32
*Broadcasting Station is Model Installation 148

Page

Company Increases Office Personnel and Space 33
Franchise Bid Proposes Reduction in Rates 258
Renewal of Utility's Franchise to be Submitted to Voters in May..... 294
Voters Refuse Utility Franchise Renewal 535
Has Third Electrical Home Exhibit..... 602
Central Station Issues House Organ.... 600
Men Graduated by Public Utility Speaking School 599
Company Will Apply for Franchise Renewal in May 185
Design and Operation Features of Automatic Substations 486
Design of Automatic Regulatior Heads..... 488
Design and Application of System Calculating Board 478
*Details of the Soda Development of the Utah Power & Light Company..... 123
*Device for Plugging Up Holes in Knock-Out Boxes 60
Development Plans Announced by San Joaquin Company for 1925..... 374
Direct-Mail Advertising 511
Directors Elected by Society for Electrical Development 191
Disconnecting Switch Completely Full-Floating 366
Disk-Type Thermostat Used in Westinghouse Curling Iron..... 380
Display Case Lighting Potential Field for Contractors 290
Disposal of Colorado Springs System is Completed 146
Distribution Transformer Ratios..... 469
Distribution Transformer Standardization.. 436
*Do Electrical Men Practice What They Preach? 218
Do You Sell Radio Engineering or Radio Entertainment 60
Duct Line Temperature Measurement..... 449

E

Eastern Oregon Service Will Be Improved During 1925 68
†Eastwood, John S.—Engineer Suggests Naming Some Phase of Big Creek Project for 273
Edison—
Bronze Tablet Erected in Honor of Thomas A. 603
Company Awards Cups for District Efficiency 225
Company to Build Third 220-kv. Big Creek Line 597
Company to Build Substation at Arcadia, Calif. 146
*Lighting Institute 221
†Education But the Man That Makes a Good Executive—It's Not the..... 349
Effect of Wave Shape on Time-Current Characteristics of Time Relays..... 444
Electragists—
Hold Quarterly Meeting in Visalia..... 342
Annual Meeting, Reservations Now Being Made for..... 601
Attend Opening Baseball Game in a Group 303
Elect New President, Association..... 263
Makes Suggestion Which Trebles Contract 291
Manager to Attend California Meeting 114
President, James Remsen Strong Retires as 264
†Policy of Distribution 309
South Hold Quarterly Meeting June 27.... 603
Electric—
*Air Heating Load Desirable, Is the?.... 361
Air Heaters Supplement Defunct Steam Heat 251
Growing Importance of Air Heating.... 403
Apartment—Comparative Cost of Operating a Gas and an Electric Apartment 247
*Arc Welding Applied to Manganese Steel 106
*Chick Hatchery, World's Largest..... 48
Clubs 33, 153
*Cooking 560
Domestic and Commercial Cooking..... 398
Grain Elevator Built by Vancouver Company 226
Heat, The Industrial Application of..... 416
Heaters 21
Heating & Manufacturing Co..... 24
Home ..... 112, 141, 142*, 145*, 180*, 182*, 204*, 240, 255*.
Home Planned by Tacoma Electric Club, Another 112
Home to Be Displayed in Denver..... 346
*Lehr, Annealing Glass with the..... 356
Meters, New Development in..... 441
*Power for Orchard Spraying..... 129
Oil Pumping 35
*Operation of the C.M.& St.P. Railway Comparative Costs of Steam and..... 207
Range, New Small Electric Range Placed on Market..... 369
*Range Has Been Put on Market, New Type of 336
Rates in San Francisco, Investigation Asked 341

Page

*Refrigeration — (Introducing Electric Refrigeration in Spokane) 63
Sterilizer for the Average Sized Dairy 323
Traffic Towers to Be Installed in Denver 336
Transportation and the Central Station 417
Trucks 31
Truck School to Be Held in San Francisco 343
What's the Matter with the Electric Truck? 348
Utilities Are Presented to Stockholders, Annual Reports of Six..... 376
*Water Heating 560
Electrical—
Aparatus, New Developments in Design, Application and Operation of.... 453
Appliances, Increasing the Use of..... 389
Bowling League Organized in Los Angeles 267
Code 34
Code, Only Minor Changes in the 1925 254
Contractors of North Bay District Form League 264
*Contractor Electrifies His Own Home.. 180
Contractor Advertises Through Service Bureau 255
Contractor, Safety-First Installations for 370
†Cooperative Campaign 41
*Devices in Modern Home Demonstrated 142
Development League Organized, Peninsula 383
Equipment Exhibit is Held in Los Angeles 29
*Farm, Snook O'Brien's Model Diversified 591
*Features of the New Long Beach Steam Plant 199
*Gifts for June Brides, Will You Sell? 332
Home Exhibit, Denver Has Third..... 602
Industry Voices Regret at Death of J. A. Lighthipe 295
Inspectors' Association Formed in California 22
Inspectors to Meet in San Francisco in March 227
Inspectors of State Hold Successful Convention 305
Jobbing House Opens New Establishment in Oakland 262
Manufacture of Carbon Black..... 152
Men Should Explain Code to Dealers.... 292
†Reservoir, The Contractor is Outlet of the 347
†Safety, The Industry Should Preach the Doctrine of 347
Safety Orders, Contractors Interested in 291
Safety Orders Hearing Dates Set, Tentative 374
Trade Associations Should Be Supported 215
†Wedding Anniversary, Why Not?..... 2
Electrically—
Equipped Cafe in Utility's Former Home 141
*Heated Fire Houses New Field for Contractors 214
*Heated Melting Pots and Ovens..... 368
Heated Modesto Office Building..... 371
*Heated Water-Boiler, Contractor Makes 369
Electrification—
Oil Fields Contemplated by Union Oil Company 597
*Rural Electrification in California..... 581
†Should Begin At Home, Complete..... 157
Washington Farms to Be Surveyed..... 335
Electricity—
And the California Dairy Farm..... 408
*California Farms and Farm Homes.... 12
Finds a New Use in the Food Industry 310
*In the Modern Newspaper Pressroom.. 330
*In the Salt Creek Oil Fields, Utilization of 359
Is the Safest Form of Light, Heat and Power 368
*Now Used by San Francisco Banks..... 22
*Simplifies Operation of a Modern Steel Mill 316
Electrify Rolling Mills, Largest Steel Mill in West to 597
*Electrified Apartments 65, 139
Electrolier System Financed by New Method 214
†Electro-Thermo-Zoologist Required to Answer Question Raised by Engineer..... 197
Electrolysis Depreciation, A Method of Calculating 367
"Elektrik-Nite," Entertainment Held at Salt Lake 229
Elko, B. C. Plant, New Unit Added..... 539
Emergency Act Provides for Tax on Utility Earnings 259
Employees Home Lighting Contest Held by Pacific Company 379
Employees' Manual Contest Closed by Washington Utility 602
Employees Suggest Many Possible Improvements to Service 176
Engineer ..... 17, †40
†Engineer Suggests Naming Some Phase of Big Creek Project for John S. Eastwood.. 273

S-m 21 E T 28

Page

Engineering Data from Aerial Views..... 379
English Contractors' Association Protects Its Membership 140
Membership 140
†English Version of an American Hydro Project 272
Equipment Tests Exhibited Before Seattle Club 153
Eureka Annual Convention City of California Electragists 227
Error in Washing Machine Directory Noted 113
Essay Contest is Discussed at Association Meetings 73
Eugene, Ore., Files on Power Site..... 600
†Evil of "Courtesy" Discount 1
Executive Committee Meeting Produces Real Results 265
†Executives of the Future, Specialization and the 233
*Experiment in Lifting Salmon Over High Dams, An 50
Explosion at Long Beach Plant Kills Four Workmen 69
Extensions Are Made to Pueblo Street-Lighting System 378

F

Factors Governing Underground Construction 450
Factory Is Being Built by Chicago Manufacturer, New 251
Faculty for Pacific Coast Truck School Is Announced 374
Fageol Motors Company Develops Gas-Electric Type Bus 28
†Fair Competition Brings a Howl from the Jingoes 121
*Farm Electrification in California..... 581
Farm Lighting, Stimulating Interest in Better 407
Feather River North Fork Tributaries—Application Filed for Appropriation of Water from 375
Feather River Power Development Project, Construction to Start on..... 334
Federal Control of Boulder Dam Power and Water Favored 110
*Fibre Cylinder Used to Carry Station Report Sheet 17
Fifty-Five Millions Spent by P.G.& E. in 1924 113
Fight on Denver Company's Bid ffor Franchise Continues 340
Final Bureau Reports Are Presented at Commercial Section Meeting 299
Final Technical Section Conclave Held at Fresno 265
Financing Electric Homes Adopted in San Diego, New Method of 240
Fire Caused by Failure of Oil-Filled Apparatus 498
*Fire Extinguishers Mounted Upon Machine Housing, Four 176
*Fire Extinguishers, Proper Use of Shown by Placards 367
Fire-Fighting—
Apparatus at Long Beach Steam Plant No. 2 500
Equipment Used by L. A. Bureau of Power and Light..... 498
Equipment and Experience of the Edison Company 499
Practices of San Joaquin Light & Power Corporation 498
*Fireproof Bungalow Built for Dispatcher's Office 213
First Aid Training..... 426
First Unit of Seal Beach Plant is Nearing Completion 259
Fit the Store Layout to the Individual Business 64
Five Western Utilities Share in $22,948,000 Budget 261
Fixed Capital Accounting 282
†Fixtures Needed in House Specifications, Larger Allowance for 235
Florence Lake Tunnel..... 147, 157†, 160, 161*, 163*, 187*
Florence Lake Tunnel Officially Goes Into Service 335
Following Up the National Better Home Lighting Contest 408
†Food Industry, Electricity Finds a New Use in the 310
Four Special Trains Will Bring Delegates to Convention 229
Foundation Company Starts Work on Dam at Lake Almanor 383
Four-State Columbia River Compact Authorized by Congress 258
Fourth Big Creek No. 1 Unit is Shipped.... 598
Franchise Granted for Service in Woodland, Wash. 340
Fred Foote Electrical Shop..... 303
Free Distribution to Be Made of Surplus Primers 539
Frequency Changer Operation 466
Frozen Water Pipes—Use of Electricity in Thawing Frozen Water Pipes..... 34
Funds Secured for Construction of Test Arch Dam 187
†Future of Radio 2

Page

G

*Garage, Electrical 7
Garnett Young & Co.—Long Established Concern Moves Into New Home..... 113
Gem Irrigation District Plant Under Construction 379
General Electric Co.....32, 35, *57, 72, *256
General Electric Company, Report to Stockholders Issued by 378
Generated vs. Purchased Power in Various Industries 412
Glenn County Electric Works..... 303
Goggles Over Eyeglasses, Unsafe Practice to Wear Safety 365
Golf Tournament Plans Made by Seattle Club 383
†Good Name and Great Riches..... 233
*Goof, the Get-Byer, Spurns Fortune's Ambassador 145
Gorge Creek Tunnel Contract, Irregularities Claimed in 597
†Government Ownership, President Coolidge Reiterates Stand Against..... 195
Grays Harbor Company Announces Rate Reductions 599
Grays Harbor Company to Develop Power on Olympia Peninsula 374
Grays Harbor Company Files on Two Washington Sites 149
Great Northern Is to Electrify 30 Miles of Main Line 341
Great Northern Railway to Start Electrification of Western Division 259
Great Western Power's S. F. Division in New Offices 600
Great Western Power Company..... †2, 4, 5, 66, *84, *99, 112, 147, 150, *551
Ground Current Control and Station Electrical Grounds 492
*Ground Current Control and Station Grounds 54
*Grounding Rules, Industrial Accident Commission 328
Growing Importance of Electric Air Heating 403
Guests' Entertainment Provided in Convention Plans 535

H

Handbook on Kitchen Unit Sales Campaign Is Published 297
Handy Yardstick for Measuring Lamp Cord or Small Wire 58
Heating and Cooking Loads, The Demand Factor in 329
Heating Patents Upheld by Court..... 226
Heating School in San Francisco June 9-13 Hold Industrial 382
*Helping the Dealer to Sell Lighting Fixtures 257
Hetch Hetchy 42*, 83*, 111, 184, 187, 222, 294, 535
Hetch Hetchy Power Disposal, No Agreement Reached on 535
Hicks, Wesley W. 226
*High Tension Power Line Completed and Put Into Service in Northern California 18
High-Tension Oil-Circuit Breakers..... 464
High-Tension Metering for Operating Purposes 441
High-Voltage Insulators in Service, Testing 437
Hold Industrial Heating School in San Francisco June 9-13 382
Hold Hearing on Washington Company's Rates June 15 380
Hold Better Lighting School in Oakland Feb. 2-13 115
Home Lighting Campaign Planned by Westinghouse, Dealer 602
Home Lighting Contest—..... 69
Announce Winners in Employees'..... 298
Announce Prizes for Employees'..... 266
Featured in Power Company Organ..... 222
Held by Pacific Company, Employees.... 379
Home Lighting Course 35
*Home Lighting Program Presented to Parlor Club 58
Home Pictures of Application of Electricity Sought by S.E.D..... 600
House Organ to Be Published by Denver Central Station 600
House Organs, Internal and External..... 514
H. P. Wilson Comments on Great Western-San Joaquin Merger 147
Hydroelectric—
*Construction and Progress to Meet Growing Power Demand..... 544
Development on Coast, Official Investigates 111
Generating Plants in the Eleven Western States, 1924-25, Some Additions to 88, 89
States, 1924-25, Some Additions to.....88, 89
Power Plant to Be Erected at Oroville.. 341
Plant 35
*Hydro Plant to Be Built on Kings River, America's Highest Head..... 241

I

Idaho 30
Idaho Chapter of A.A.E. Holds Meeting at Twin Falls 153

Page

*Idaho Power Co. 91, 372
†If Municipal Employees are Taxed Then Tax Municipal Corporations 39
*Illinois Pacific Glass Co..... 356
Illuminate San Diego Pool with Underwater Floodlights 601
Illuminating Engineers See Automotive Lamp-Testing Equipment 191
Illumination at University Southern California Taught 32
Increasing Oil-Circuit Breaker-Interrupting Capacity 459
Increasing the Use of Electrical Appliances 389
Index Volume Journal of Electricity Ready 33
Inductive Co-ordination Report Published.... 111
Induction Motor, Simple Method for Finding Speed of an 108
*Industrial Accident Commission Grounding Rules 328
Industrial—
Application of Electric Heat..... 416
*Application of Electric Heaters, New 21
*Heating 559
Heating School for San Francisco June 9-13 343
Lighting Campaign Plan of N.E.L.A., Nation-Wide 261
*Site Effects Concentration of Supplies 134
†Industry Should Preach the Doctrine of Electrical Safety 347
Information on N.E.L.A. Convention Transportation Presented 340
*Ingersoll Rand Co. 57
*Initiative Aids Electragists in Successful Business 178
Inspectors' Association 22
Inspection and Testing of Material and Equipment 522
*Institutional Advertising That Increased Business 143
Insulator Tests Now in Progress at Oregon College 251
*Insull Medal 30
*Interconnected Transmission System of California 563
*International Electric & Machinery Company 25
†Interdependent Industry 3
Interrupting Capacity of Oil-Circuit Breakers Manufactured on the Pacific Coast.... 463
Investigation of Electric Rates in San Francisco Asked 341
*Irons, Dealers Display World's Largest Reproduction of 598
Irregularities Claimed in Gorge Creek Tunnel Contract 597
Irrigation Districts and Utility Join in Power Project 602
Irrigation Districts Not Public Utility, Ruling Holds 112
*Is the Electric Air-Heating Load Desirable? 361
It's Not the Education But the Man That Makes a Good Executive 349

J

†Jack and the Wrong Beanstock..... 157
James Remsen Strong Retires as Electragists' President 264
*Japan's First Electric Home Inspected by Sixteen Thousand People..... 204
Japanese—
Steam Plant Completed..... 343
Utility Orders Large Turbine Generators 226
Utility Plans Extensive Power Development Project 602
Utility to Develop Two New Power Sites 222
†Job So Big That Its Significance Is Lost.... 159
Jobbers Hold Quarterly Meeting at Santa Barbara 540
Jobbers to Meet at Santa Barbara..... 305
Joint Development of Wynooche Proposed by Utility 223
June Bride—
Campaign Rests with the Industry, Success of 310
*Gift Campaign, Publicity Aids Prepared for 333
*Will You Sell Electrical Gifts for?..... 332
Jury Fixes Value of Property Condemned by Loveland 150

K

Kalama 33
†Keeping in Close Touch with the Consumer 158
†Keep Smiling Through 1925..... 3
Kelman Switches at Laguna Bell Station, Short Circuit Duty on 471
Kitchen—
Lighting 10
Lighting Campaign Being Conducted in San Diego 379
*Unit Campaign Record Made by Idaho Company 372
Unit Sales Campaign is Published, Handbook on 297
*Know What, Why and When and Collect the Yen 65
Kuhara Mining Company, Japan, Plans Power Plant 335

Page

L

Laboratory to Be Installed at Stanford, 2,000,000 Volt ... 222
Laguna Bell Station, Short Circuit Duty on Kelman Switches at ... 471
*Lake Almanor ... 551
Capacity, Work is Started on Increasing ... 295
Foundation Company Starts Work on Dam at ... 383
Lake Cushman-Tacoma Transmission Line ... 28
†Larger Allowances for Fixtures Needed in House Specifications ... 235
Largest Steel Mill in the West to Electrify Rolling Mills ... 597
Largest Turbines in West Designed for Pit No. 3 ... 174
*Late Developments in the Newspaper Cooking Schools ... 166
Latest Development in Pacific Coast Steam Plant Practice ... 501
*Latticed Steel Used for Heavy-Duty Terminal Poles ... 16
†Lawyers or Engineers, Both Hold Executive Positions ... 349
Legislatures Discuss Approval of Colorado River Pact ... 259
Letters from a Secretary to a Self-Made Contractor ... 369
Lewis River Company is Denied Permit for Power Site ... 66
Lewiston Accepts Offer of Power and Lumber Companies ... 334
Lewiston, Idaho, Receives Proposals for Power and Sawmill Projects ... 297
Lewiston Property Taken Over by Portland Company ... 150
†Life in a California Construction Camp ... 196
†Lighthipe, James A., In Memory of ... 271, 295*, 311†
Lighting—
Campaign Plan of N.E.L.A. Nation-Wide Industrial ... 261
Bulletin Issued by Westinghouse Company ... 341
*Fixtures, Helping the Dealer to Sell ... 257
Institute Opened ... 185
†Offers a Broad Field for Increasing Revenue ... 271
Service Bureau an Aid to Salt Lake Contractors ... 254
Line Extension Made by Texas Company ... 111
Lineman, The ... 107
Long Beach—
Electric Club Announces Officers ... 343
*Steam Plant, Electrical Features of the New ... 199
Steam Plant No. 2, Fire-Fighting Apparatus at ... 500
Long Bell Electrification is Described Before Engineers ... 69
Loose Rotor Bars Well Repaired with Silver Solder ... 249
Los Angeles—
Ballot, Colorado River Waterworks Plan on ... 535
Contractor-Dealers to Hold Annual Ball ... 153
Electric Club Holds Annual Election ... 153
†Electric Club Pays Tribute to the Memory of J. A. Lighthipe ... 311
Jobbers' Bowling League Trophy Awarded in ... 539
Power Bureau ... 33
Los Angeles Gas & Electric Corp. ... 8, *86, *132, *576
*Los Cerritos Substation ... 19
*Loud Speaker Now Used to Place Orders in Lunch Room ... 108
*Lumbering ... 561
*Lumber Industry—A Potential Utility Load ... 586

M

*Machine Bores Tower Foundation in Solid Rock ... 327
Magnetic Separator Preserves Combustible Material ... 250
Make Your Wiring Jobs Advertise and Create Future Sales ... 59
Mansfield Will Be Westinghouse Merchandising Center ... 375
Manual for Employees Is Issued by Washington Utility ... 341
Manual Aids District Office Employees in Relations with Consumers ... 321
Manufacturer Prepares Displays for Central Stations ... 602
*Marysville Business Man Sold on Complete Electrification ... 214
Material and Equipment, Annual Inventories of ... 527
Material and Equipment Handling Devices ... 524
Material and Equipment, Standardization of ... 522
Material and Equipment, Inspection and Testing of ... 522
Material and Equipment, Supervision of ... 522
Material and Equipment, Procuring of ... 523
Material to be Bought for Towers for Hetch Hetchy Newark-San Francisco Transmission Line ... 111
McGraw, James H., Offers Four Annual Awards for Electrical Men ... 538
*Melting Pots and Ovens are Heated Electrically ... 368
Membership Cards Valuable Assets to Association ... 253
Membership Lists, Contractors Make Valuable Use of ... 370
*Merced Irrigation District ... 83
*Mergers ... 5
Messages for Backs of Monthly Bills are Prepared ... 600
Meter Bearings, Use of Oil in ... 440
*Meter School is Gratifying Success, Second Arizona ... 380
Meter Transformer Characteristics, Pacific Electric Manufacturing Company ... 479
Meters for Various Installations, Proper Sizes of ... 442
Method of Calculating Electrolysis Depreciation ... 367
Metering, Various Phases of ... 439
Minimum Wiring Specifications of B. C. Service League ... 109
Minor Changes in the 1925 Electrical Code, Only ... 254
†Mistake or Challenge ... 310
*Model Diversified Electrical Farm, Snook O'Brien's ... 591
Model Electric Home Exhibited in Petaluma, Calif. ... 141
Model Plant an Aid in Industrial Electric Field ... 216
*Modern Home of the Los Angeles Gas & Electric Corporation ... 132
Modern Pole-Treating Plant Fills Entire Need ... 324
Modesto Office Building to Be Heated Electrically ... 371
*Montana Power Co. ... 95, 374
†Monument to Private Enterprise and Initiative ... 157
Motor Company Aids Improvement in Wiring Conditions ... 140
*Motor Dealer's Shop ... 25
*Motor Story Told with Aid of Traveling Display ... 256
Mountain States Company Enlarges Operations by Purchase ... 375
Mountain States Power Co. ... 111, 261, 374, 375
Municipal Water System Salaries Not Exempt from Tax ... 72
Muscle Shoals Power May Not Be Sold During Test Period ... 601
Mystic Lake Plant of Montana Utility Put in Operation ... 374

N

Name Adopted by Association at Recent Meeting at Napa ... 342
Nation-Wide Industrial Lighting Campaign Plan of N.E.L.A. ... 261
National—
Electrical Code to Be Issued Again in 1925 ... 59
Electrical Safety Code, Changes Made ... 293
Home Lighting Contest ... †41, *69
Lamp Works, Creation of Three New Sales Divisions Announced by ... 369
Lamp Works Issues "Four Star Book for 1925" ... 226
Natrona Power Company Bought by Byllesby Interests ... 341
Navy's Largest Vessel Has Steam-Electric Power Plant ... 340
N.E.L.A.—
Convention Means to the Pacific Coast, What the ... 543
Convention Are Nearing Completion, Plans for Conduct of ... 381
Convention Program Announced ... 383
†Convention Success Depends Upon United Western Effort ... 40
Convention, Information on Transportation Presented ... 340
Convention Announced, Tentative Program for ... 118
Convention Discussed at Meeting, Arrangements for ... 298
Endorses Work of Better Business Bureau ... 34
Publishes Book on Political Ownership ... 335
Welcome ... 541
Nela Lighting Courses Popular, Attendance Shows ... 229
Nevada Irrigation District ... 29
New—
Building for Burned Transformer Plant Being Erected Rapidly ... 294
Code Discussion at Annual Meeting of League ... 303
Customer-Relations Booklet Published in Vancouver ... 187
Development in Electric Meters ... 441
Developments in Design, Application and Operation of Electrical Apparatus ... 453
Executives are Installed by Los Angeles Club ... 229
Factory is Being Built by Chicago Manufacturer ... 251
Lighting District Formed in Salt Lake City ... 186
Method of Financing Electric Homes Adopted in San Diego ... 240
*Million Dollar Shops of the Southern California Edison Company ... 275
Offices for Executives of Great Western Power Co. ... 150
Record Established in Sale of Kitchen Lighting Units ... 10
Small Electric Range Placed on Market ... 369
State Electric Supply & Fixture Co. ... 27
Street Lighting for Provo, Utah ... 339
Types of Protective Relays ... 471
Type of Electric Range Has Been Put on Market ... 336
Unit Added to Elko, B. C., Plant ... 539
*60-kv. Substation Completed at Spokane, Wash. ... 364
New Mexico—
Convention, Tentative Dates Set for ... 267
Utility Will Erect New Steam Plant ... 150
Electric Light Association Convention Postponed ... 153
Northwest—
Association Public Relations Section Meets ... 343
†Electric Light & Power Association ... 347
†For Utility Executives of the ... 310
Technical Section to Meet in Spokane April 16 ... 267
*Technical Section Held in Spokane April 16-17, Second Annual Meeting of ... 337
Northwestern Electric Bought by American Power & Light ... 184
*Northwestern Electric Co.— ... 85, 295
Guy W. Talbot to Head ... 260
Takes Larger Quarters ... 295
†Not "Beware of the Dog" but "Visitors Welcome" ... 158
*Novel Displays Increase Washing Machine Sales ... 183
*Next Five Years Promise Record Growth for the Industry ... 101
No Apology is to Be Made for Wyer Niagara Falls Report ... 335
Northern Counties Development League Meets at Corning ... 227

O

Oakland Electric Club Elects Officers for Ensuing Year ... 267
Oakland Electric Club Installs Officers for Year ... 305
Obituary ...
Bump, M. R., 385; Bixler, George W., 193; Burke, Thomas F., 231.
Doble, Robert McF., 193; Dee, John R., 155.
Easton, Lynn B., 155.
Forsman, Alphonse, 155.
Graf, Dr. A. F., 605; Gorton, R. E., 345.
Howe, Glenn Grenville, 117.
Josselyn, B. S., 605.
Lighthipe, James A., 295.
Moore, Leroy, 117.
Nunn, L. L., 307.
Ohi, Dr. Saitaro, 231.
Poole, C. O., 345.
Schoemer, Joseph, 345; Sechrist, Mrs. Hattie K., 117.
Upson, Claire P., 75.
Wayland, Audrey, 37; Wilder, Vernon, 269.
Observe Better Homes Week During Month of May ... 262
*Office Lighting, Suggestions on Proper ... 280
Officers of Long Beach Electric Club Announced ... 343
Official Investigates Hydroelectric Development on Coast ... 111
Ogden Electrical Distribution ... 35
Oil-Circuit Breaker—
Experiences and Problems ... 460
Manufactured on the Pacific Coast, Interrupting Capacity of ... 463
Interrupting Capacity, Increasing ... 459
Of Pacific Coast Manufacture, Results of Tests on ... 463
Short Circuit Tests on Kelman Type Y15 ... 464
*Oil Fields ... 558
Oil Fields Electrification Contemplated by Union Oil Company ... 597
†Omar and the Central Station ... 79
One Fly Power Sufficient to Run Radio Set 25 Years ... 326
Open Letter to Electrical Contractor in Business ... 293
Opening Bids in Public Urged for all Contractors ... 290
Operating Manual on Polyphase Watt-Hour Meters Published ... 336
Opinion on Agency Disposal of Hetch Hetchy Power ... 222
†Opportunity to Learn "What's the Matter with the Electric Truck" ... 348
†Orchard Spray Pumps, Application of Portable Motors for ... 234
†Orchard Spray, A New Field for the Electric Motor ... 120

Page

†Orchard Spraying, Suggestion Made That Portable Motors Be Used for 197
Order Survey of Skagit Project in Recent Ordinance 147
Orders Placed for Baker River Hydro Plant Equipment 184
Oregon 34
Oroville, Calif., Contemplates Acquiring Power System 223
*O'Shaugnessy Dam 42, 553
Outdoor Distribution Substation 251
*Outdoor Switching Station Finished at Lents, New 104
Overhead Systems Bureau Report on Meeting Presented 190
Own Installation Sells Show-Case Lighting for Contractor 329

P

Pacific Coast—
Jobbers to Meet at Del Monte 73
Number Issued by Western Electric Dealer 600
*Steel Company 316, 317
Truck School Faculty is Announced 374
Pacific—
Division Executive Committeeman Attends Meeting of Association of Electragists, International 263
*Electric Motor Company in Oakland 217
Electric Manufacturing Company Meter Transformer Characteristics 479
Power & Light Company Holds Managers' Meeting 343
Radio Trades Association Holds First Banquet 118
Pacific Gas and Electric Co.— 41, 67, 73, 82, 83*, 98*, 110, 111, 112, 113, 174*, 186*, 350*, 469, 473, 495, 552*, 555*, 598*, 602
Power Interchange 469
Employees Meet in Sacramento 305
P. G. and E. Company Occupies New Headquarters Building 224
*Pacific Power & Light Co. 86, 94, 343, 379, 380
*Panel Switchboard Manufactured in Modern Plant 292
*Pasadena, City of 86
P.C.E.A.—
Commercial Section to Meet 266
Committee Reports to Appear June 1 270
Meet 35, 73, 115, 153
Papers Must Be in Hands of Secretary by April 1 ..... 186, 267
Peninsula Electrical Development League Organized 383
†Periodic Inspection of Domestic Appliances 120
Permits Covering Western Sites Granted by Commission 262
Permits for 125,000-hp. Project in California Issued 66

Personals .....

Aaron, P. J., 230; Adams, E. D., 231; Addison, Dr. Thomas, 307; Albaugh, S. L., 269; Alberts, J. C., 75; Allen, Edgar E., 192; Anderson, Grover A., 117; Anderson, H., 345; Anderson, J. W., 230; Anderson, P. A., 605; Apfel, P. F., 269; Appleton, Albert I., 231; Averill, F. N., 192, 268; Averill, N. W., 192.

Babcock, A. H. 36; Badrian, Bernhard, 75; Baily, Ben P., 116; Baker, H. E., 345; Baldwin, G. P., 230; Baldwin, Capt. G. B., 269; Ballard, R. H. ,605; Balzari, R. A., 37; Baracco, Gus, 117; Barbachano, M. P., 193; Barnett, F. G., 384; Barker, George W., 192; Barker, H. L., 192; Barnes, D. C., 74; Barth, Bruno, 192; Beach, L. D., 75; Bear, William P., 75; Beatty, William N., 36; Beebe, J. L., 604; Benjamin, Stanley W., 117; Bennett, Lee, 344, 385; Bernsten, H. C., 344; Berryman, W. J., 75; Birkett, M. W., *230; Bishop, S. W., 155; Black, John, 192; Blanchard, A. D., 385 Bleak, R. M., 75, 154; Blecksmith, A.F.,269, 384; Blight, A.F., 605; Bloom, C.A., 605; Board, V. L., 155*; Bokius, J. K., 344; Boreham, G. E., 345; Boring, M. M., 192; Bourne, Murray, 74, 230; Bourus, J. M., 36; Boyce, W. G., 117, 193; Boyles, R. G., 74; Bourne, E. L., 231; Bozell, Harold V., 75; Brackenridge, W. A., 268; Brainerd, W. F., 269; Breed, E. M., 306; Bridger, J., 74; Broili, F. O., 384; Brown, H. D., 384; Brown, John C., 230; Browne, F. E., 230; Brown, W. C., 193; Brownell, F. W., 269; Brundige, H. W., 231*; Brydon, H. B., 307; Buckle, J. V., 75; Buckley, L. B., 231; Bundy, Ora, 230; Burgess, Carl, 231, 268; Burley, H. B., 307; Busey, John L., 154; Byrne, Harry, 193, 230.

Caldwell, G. G., 385; Callender, Sir Thomas, 384*; Campbell, John C., 154*; Cannon, J. A., 36; Carpenter, W. H., 116; Carson, Dave, 117; Case, J. O., 154; Cayo, A. B., 306; Chamberlain, R. G., 604; Champion, E. L., 75; Childs, R. B., 604; Clardy, C. C., 192; Clarke, A. L., 384; Clark, C. M., 605; Clark, Dean D., 37; Clark, Fred, 192; Clark, J. C., 344-345; Clarke, Kenneth E., 269, 307; Clark, R. W., 37; Coldwell, H. P., 384; Conery, William, 231; Cooper, J. J., 37; Cordiner, R. W., 604; Corey, Glen L., 116; Cornell, A.. C., 306, 384; Courtwright, H. H., 75; Cowgill, Hal. E., 605; Cox, H. H., 75; Crawford, W. H., 230; Creed, W. E., 154; Crider, E. L., 269; Cross, C. W., 230; Crozier, H. W., 268; Culbert, C. L., 36; Cunningham, J. H., 74; Cunningham, R. E., 605; Curtin, J. M., 155, 231; Cyr, W. A., 117.

Dabney, Frank 37; Daley, Harry, 230; Daley, H. H., 306; D'Almaine, Harry, 344; Dana, Frank, 268; Davidson, J. P., 307, 344; Davis, Lawrence, 155; Davis, Robert M., 116, 154; Dazey, K. L., 75; Delancie, Harry S., 155; De Lew, M. A., 604; Dellman, G. H. P., 117; Devine, C. E., 307; Dicke, H. F., 605; Doherty, Henry L., 192; Dorner, Leo, 230; Dowd, Ed., 117; Downing, P. M., 268; Drennan, G. I., 385; Duncan, Thos., 193, 384; Dunkelberger, H. M., 344; Dukelow, T. H., 605; Durand, Dr. W. F., 36; De Conly, J. C., 36.

Easton, F. L., 37, 306; Eaton, George M., 116; Edgar, C. L., 37; Edgerton, Maj. G. E., 604; Edwards, Clarke F., 154; Elkas, I., 192; Ellis, E. M., 385; Ellis, H. R., 230; Emmons, G. E., 154; Ettiene, W. J., 268; Evans, R. D., 193.

Fairbank, J. P., 268; Faller, G. W., 155; Farley, John, 269; Farnham, George W., 192; Farr, N. N., 192; Fenton, J. H., 231; Ferguson, H. M., 75; Ferry, J. W., 117; Fibush, Martin E., 155; Finch, B. J., 230; Fishburn, Howard W., 37*; Fisher, Alvin, J., 154; Fisher, Percy, 117; Flinn, A. D., 231; Florine, Fred, 231; Forbes, S. F., 117; Forsberg, G. W., 75; Freed, L. A., 116; French, O. B., 193; Frost, A. M., 75; Garrett, P. B., 154.

Gates, Sam, 269, 307; Gelzer, J. A., 344; Gentles, Frank, 116; Gentry, R. G., 37; Gest, J. C., 345; Gibson, John J., 268, 345; Gilchrist, J. M., 116; Gilgen, Ernest, 230; Gille, H. J., 193, 269; Gleiss, Frank J., 154; Goding, L. L., 192; Goodrich, H. C., 116; Gordon, R. B., 37; Green, D. C., 75, 345; Greenawalt, John F., 36*; Greenfield, W. S., 230; Gribble, E. C., 605; Griffin, R. C., 117; Griffith, Franklin T., 117, 155; Grix, Arthur, 230; Groo, Jay S., 116; Grove, W. A., 230; Browdon, J. P., 306; Grunsky, C. E., 385; Guiver, G. J., 75.

Haase, Frederick, 36; Hagey, C. H., 344; Halderman, Grant, 344, 384; Hale, J. A., 75; Hamilton, J. C., 231; Hancock, C. J., 155; Hanley, Franklin B., 192; Hardy, C. E., 75; Harris, D. E., 306; Hartley, Victor W., 37; Hartzell, H. F., 604; Hathaway, A. R., 384; Haver, S. C., Jr., 605; Hawkins, E. S., 192; Hawley, Curtis B., 74*, 155,; Hawley, W. A., 307; Headrick, E. C., 192, 269, 306; Hearn, R. L., 605; Heckman, G. C., 74; Heilbron, Carl, 231; Henderson, A. F., 344; Henderson, James, 36; Henninger, G. R., 268; Herr, E. M., 117; Heywood, Franklin, 192; Hibbert, George T., Jr., 154; Hickox, Norman B., 269; Hicks, W. Wesley, 155; Hightshoe, R. D., 307; Hill, B. C., 306; Hillebrand, W. A., 604; Hobbs, L. A., 192; Hodgson, G. O., 268, 345; Hoflich, William, 74; Holabird, Harry G., 344; Holloway, A. E., 36*, 155, 231; Holtermann, A. H., 344; Hopkins, Ralph, 75, 385; Hoyt, John C., 268; Hubbard, John W., 384; Hunt, L. F., 345; Hunt, L. G., 116; Hunter, Giles, 344; Huntington, D. L., 306; Huttinger, W. H., 269, 307; Hyde, John Orson, 75; Hynes, W. F., 74.

Ingalls, R. P., 306; Irwin, H. F., 230; Isbell, Arthur, 154.

Jackman, H. L., 230; Jackson, D. C., 345; Jackson, D. J., 604; Jamison, Frank R., 230; Jamison, J. H., 230; Jetton, L. H., 345; Johnson, M. M., 345; Jones, Claude, 605; Jones, D. S., 344, 384; Jones, F. C., 307; Jones, G. H., 36; Jones, H. H., 269, 345; Jordan, J. Charles, 37; Joy, A. C., 344.

Kaemper, W. H., 268, 307; Kahn, J. A., 75, 116; Kahn, Samuel, 36, 117*; Keeler, Clarence, 231; Kellogg, M. W., 268; Keleher, J. T., 231; Kellogg, R. B., 74; Kelly, Col. William, 604; Kelsey, H. G., 231, 307; Kempston, Arthur, 74; Kennedy, S. M., 36; Kenney, C. B., 154*; Kent, J. D., 306, 385; Kerschner, R. M., 344; Ketchem, Frank A., 74; Kidder, E. E., 230; Kilmore, J. B., 116; King, S. Arnold, 74; King, Stafford J., 116; Kinkaid, G. F., 384; Kinkead, R. E., 604; Kinmore, J. B., 116; Kinney, E. H., 345; Klauber, L. M., 116, 155; Knelson, H. R., 604; Kohlwey, Mrs. W. B., 231; Kohnstamm, F.R.,193.

Lafflin, J. M., 344; Laing, John S., 231; Langthorn, J. S., 231; Lannon, F. P., 384; Lanphear, H. L., 116; Lanyon, S. H., 345; Lapp, J. S., 345; Lappin, D. C., 230; Lardner, Henry, 231; Lasher, C. E., 604; Lawton, R. B., 75; Leigh, H. E., 344; Lemoge, Victor, 117; Leonard, A. W., 193, 269; Lewis, C. L., 345; Lewis, George E., 155; Lewis, L. A., 604; Libbey, R. C. W., 74, 116; Lincoln, James W., 230; Loiseau, John E., 116*, 155; Lovejoy, E. P., Jr., 155; Lowe, D. T., 307; Lyman, Edward D., 231; Lyman, Oliver B., 192.

Macdonald, J. E., 604; Macy, E. C., 230; Marple, R. D., 117; Martin, Harry J., 155; Matteson, B. W., 230; Matteson, P. E., 384; May, Al., 117; May, H. B., 385, 605; Maxwell, M. P., 604; McCleary, Ernest, 193; McGrath, T. J., 230; McGrath, W. H., 269, 345; Melvin, H. L., 74*; Merrick, F. A., 116; Merrill, Z. E., 604; Mezinard, Felix, 192; Miller, Arch, 268; Mills, F. S., 154; Miller, J. G., 385; Miller, Robt., 75, 117; Mitchell, Claude W., 75; Mobley, Walter, 117; Moe, Henrik, 605; Moeller, R. C., 74; Monteith, C.D., 268, 269; Mooney, Harry V., 116, 306; Morairty, A. F., 385; Morris, John, 75; Moser, W. A., 75; Muffley, I. U., 74; Mulhollond, William 385; Mullin, J. J., 385; Muir, G. A., 604; Murphy, F. N., 384; McArthur, Lewis A., 36; McFarland L. D., 269; McKee, P. D., 230; McLaughlin, J. F., 307; McLean, E. M., 605; McMicken, A. C., 269, 307; McMullin, T. D., 154; McRae, Roderick, 75; McSpadden, E. T., 36.

Naugle, J. Barclay, 307; Neill, W. T., 74, 116; Nelson, C. B., 344; Newell, L. S., 345; Newhouse, R. C., 268; Nibley, J. F., 117; Noble, H. A., 117; Nollenberger, Ted, 345; Norris, H. A., 269; Norton, C. F., 268.

O'Brien, Leo. J., 193; Osborn, N. B., 269; Overton, Paul, 344.

Palmer, E. A., 37*; Parkhurst, W. L., 344; Parry, P. M., 75-231; Payne, Harold J., 345; Pengilly, J. H., 604; Perlewitz, J. H., 37, 75; Perry, Frank, 268; Phelan, R. N., 192*. 269; Phillips, J. L., 307; Phinney, E. A., 155; Pierce, Dana, 306; Plumb, H. T., 306, 344; Podesta, Al & J. E., 75; Pope, C. A., 307; Porter, H. N., 344; Price, Walter F., 37; Pupin, Dr. Michael I., 268; Purton, A. B., 268; Pythian, George F., 231.

Raber, Wm. F., 155, 231, 345; Rand, C. F., 231; Randall, George R., 74, 75; Randall, H. D., 306; Rankin, Geo. W., 36; Redpath, J. W., 192; Reeson, N. S., 306; Reeves, C., 268, 345; Rice, M. P., 154; Richards, E. G., 344; Richards, Lee, 307; Riggs, A. C., 230; Roller, F. W., 37; Rose, Herbert, 155*; Ross, H. C., 345; Rowley, B. E., 75; Rubardt, H. L., 74; Russell, C. A., 193; Ryan, Harris J., 268; Ryan, W. D'Arcy, 193, 230.

Sandoval, H. E., 36, 269; Savage, L. A., 36; Savage, R. D., 116; Sawin, G. A., 193; Sawyer, George C., 116; Sawyer, R. C., 116*; Schaefer, E. P., 192; Schmidt, Walter, 269; Schneider, Cass, 37; Schnell C. E., 74; Scholefield, C. W., 605; Schuyler, F. B., 604; Sewell, Harry B., 192; Shafer, Clement, 231; Sharon, R. A., 75*; Shattuck, C. P., 604; Shaw, C. C., 36, 192; Sherman, L. W., 269; Short, F. A., 604; Shreeve, D. M., 385; Silliman, Frank, Jr., 36; Simpson, T. M., 605; Skinner, C. E., 344; Smith, A. G., 344; Smith, F. E., 307; Smith, F. Harold, 345; Smith, Rollin, M., 604; Smith, R. E., 154; Smith, W. C., 231, 306; Sothman, P. W., 37; Southerland, F. J., 306; Sperry, E. A., 231; Spraggon, J. H., 385; Squires, H. B., 385; Stackhouse, R. C., 231; Stannard, Clare N., 155, 384; Stanton, W. P., 117; Stephens, R. T., 344, 384; Sterne, W. C., 155, 384; Stevens, Charles, 192; Stevens, Thad. J., 75; Stevens, S. Smith, 154; Stevens, W. C., 37; Stewart, R. L., 154; Stiers, L. E., 385; Stitt, H. W., 605; Stone, Ellery W., 37; Stram, L. V., 344; Stranborg, W. P., 269; Stubbs, O. B., 231, 268; Sturgeon, D. D., 37, 384.

Talbot, Guy W., 74, 155; Talbot, W. H., 116, 193, 307; Talmage, C. H., 116; Tattersall, Chas. A., 36; Terrell, C. F., 230, 306; Thomas, C. C., 230; Thomas, Frank, 269, 307; Thomas, R. D., 230, 268; Thompson, Joseph, 36; Todt, Fred, 37; Torrance, D. J., 344; Tracy, A. H., 36; Trapp, John D., 344; Tribble, George E., 344; Trowbridge, U. G., 193; Trumbull, John H. 117 ;Turnbull, R. W., 604.

Uhden, Carl F., 269.

Van Cleef, Felix, 268, 344; Van Kuran, K. E., 117, 231, 385; Vieau, A. E., 384; Vincent, W. G., 193; Viot, H. F., 307; Vivian, W. S., 384; von Hacht, Karl, 231.

Wagner, H. A., 345; Wagner, M. E., 75; Wakefield, A. F., 192; Wakeman, H. R., 306; Wallis, C. P., 155; Walker, E. E., 155; Walker, T. P., 230*, 604; Walter, R. F., 604; Ward, G. C., 154; Ward, R. L., 385; Ward, W. D., 344; Ware, Dwight, 192; Warren, Alba H., 231*; Watkin, E. A., 37; Watson, H. H., 231; Weathers, E. W., 384; Weill, S. I., 384*; Weiss, C. D., 193, 230; Weiss, H. E., 384; Welch, J. J., 36; West, E. A., 605; White, C. J., 117; White, H. T., 306; White, L. R., 231; White, W. A., 306; Whitney, G. H., 344; Wiggins, Carl 116, 117, 307; Wildman, B. J., 268, 605; Will, C. M., 230; Willard, Glenn W., 74; Williams, Harry L., 116; Wilson, Harley P., 54, 192; Winsor, Col. H. G., 75*; Wise, George W., 192; Wishon, A. Emory, 116, 231, 307, 345; Wishon A. G., 193; Wolf, Carl F., 154; Wolfsberg, R., 75, 154; Wood, L. A. S., 117; Wood, T. A., 269; Wood, T. S., 306; Woodring, H. E., 307; Woodworth, C. O., 36, 345; Wright, Lester A., 117; Wright, M. T., 230; Wurfel, Walter S., 37; Wyman, A. H., 384.

Yonley, Thomas, 344.

Page

Photographic Records Cut Cable Maintenance Expense ... 19
*Pipe Bending Device That May be Built on the Job ... 108
Pit No. 3 Tunnel, P. G. & E. ... 41
*Pit River No. 3 to Be Ready for Service Early in July ... 598
Plans—
For Camp Cooperation Made ... 229
For Conduct of N.E.L.A. Convention Are Nearing Completion ... 381
Of Pacific Coast A.S.M.E. Meeting Announced ... 267
Progress for One Body of California Electragists ... 227
*Pole Trailer Easily Made, Simple and Inexpensive ... 287
*Pole-Treating Plant Fills Entire Need, Modern ... 324
Policy of San Joaquin Company Will Not Be Changed ... 146
Polyphase Watt-Hour Meters Published, Operating Manual on ... 336
*Poor Electrical Connections Are a Public Menace ... 293
Port of Kalama Files on Two Power Project Sites ... 33
*Portland Electric Power Co. ... 84, 94, 104, 335, 557.
Portland A.I.E.E. Hears Interesting Discussion ... 35
Portland Electric Power Company Has $2,000,000 Budget ... 335
*Posting Meter Constants Helps to Maintain Confidence ... 57
Post Office Department Rules on Apartment Letter Boxes ... 140
Potential Transformer Protection Scheme Using Resistors ... 16
Powder Magazine Walls ... 17
Power Company—
†And the Radio Problem ... 273
†In the Role of True Sportsmen ... 234
*Construction Programs Set New Records for 1924-25 ... 81
Given Judgment in Rate Case ... 112
*Has Model Electrical Garage ... 7
Generation Suggested in California Water Resources Report ... 601
Interchange in San Joaquin Valley in 1924 ... 466
Irrigation Development Planned in California ... 260
*Line ... 18
Resources of Blue River Surveyed ... 535
Resources on Colorado Discussed by Engineer ... 115
Sawmill Projects, Lewiston, Idaho, Receives Proposals for ... 297
Site, City of Eugene, Ore., Files on ... 600
Sites in Washington and California Requested ... 334
*Station, The Seal Beach ... 576
*Practical Accounting for Contractors and Dealers ... 20, 60
Preliminary Permits Extended ... 66
Premature Blast Kills Four Men in Florence Lake Tunnel ... 147
†President Coolidge Reiterates Stand Against Government Ownership ... 195
Prices Clearly Shown on Tags Help Appliance Sales ... 61
†Price-Competition as a Stimulus to Sales Campaigns ... 39
Priest Rapids Hydro Project is Granted Federal License ... 222
†Priest Rapids Will Be Watched with Interest ... 272
Primitive Definition of Engineer is Brought to Light ... 17
Prizes are Offered to N.E.L.A. Membership, Four New ... 267
Prizes for Employees' Home Lighting Contest ... 266
Prizes for Sales Helps Suggestions ... 261
Proceedings of 1924 P.C.E.A. Convention Published ... 66
Procuring of Material and Equipment ... 523
Program for N.E.L.A. Convention Announced, Tentative ... 383
†Progress ... 77
†Progress, This is an Age of ... 121
Progress on Baker River Project ... 224
Proper Handling of Obsolete Scrap Material and Equipment ... 520
Proper Sizes of Meters for Various Installations ... 442
Proper Treatment of Our Customers ... 393
Proper Use of Fire Extinguishers ... 367
†Protecting the Interests of the Public ... 78
Protective Relays, New Types of ... 471
Provo Engineers Elect Officers ... 305
*Publicity Aids Prepared for June Bride Gift Campaign ... 333
*Public Menace, Poor Electrical Connections are a ... 293
†Public Relations, Beautification of Properties as a Phase of ... 347
Public Relations from the Domestic Angle ... 518
Public Relations from the Woman's Standpoint ... 530
"Public Relations" Contest for N.E.L.A. Power Companies ... 224

Page

Public Service Company of Colorado to Merchandise Radio ... 31
*Public Service Co. of Colorado ... 33, 96, 144, 601
†Public Interests Protected ... 78
Public Ownership Bill, Senator Promises to Introduce ... 110
Publicly Owned Utilities May be Taxed in California ... 262
Publicity and Its Code of Ethics ... 512
Pueblo Street-Lighting System, Extensions are Made to ... 378
Puget Sound Company—
Budget for 1925 is $8,000,000 ... 111
Celebrates Silver Anniversary ... 599
To Install Carrier Wave Telephone ... 188
To Reduce Rates for Rural Service ... 535
*Puget Sound Power & Light Co. ... 28, 30, 31, 80, 82, 83, 100, 110, 188, 237, 347†, 535
Puget Sound Power & Light Co. Plans Additional Capacity in Eastern Washington 31
Pump Used for Supplying Irrigation and Pressure Tank Service ... 371
*Pumping Plant ... 562
Pumping Plant Equipment Sold by Aid of Store Installation ... 399
Purchasing Department Organization ... 525
*Physical Examination and Age Limits of Employees ... 237

Q

Quarterly Meeting of Southern Electragists June 27 ... 603

R

†Radio ... 2, 31, 60
Radio Exhibition in Los Angeles Sept. 5-12, Third Annual ... 601
Radio Freight Rate Hearing to Start March 4 ... 184
*Radiophone Enables Ship-to-Ship Conversation at Sea ... 112
†Radio Problem and the Power Company ... 273
Railroad Applies for License to Build Transmission Line in National Forest ... 147
Range Prospects, What Classes of Consumers are Good ... 245
Rat Ties Up Carlines ... 366
Rate Reductions Announced by Grays Harbor Company ... 599
Rate Schedules in Denver, Will Investibate Report on ... 223
Reaching the Stockholder ... 516
†Reader Contends Engineers Have Equal Chance with Lawyers as Executives ... 311
Reclamation Bureau, Changes Made in Organization of ... 30
*Record Growth for the Industry, Next Five Years Promise ... 101
*Record in Kitchen Unit Campaign Made by Idaho Company ... 372
Records Show 1924 Was Year of Lowest Stream Flow in California ... 46
Reduction in Prices Announced on All Mazda Brand Lamps ... 69
Reduction in Rates, Denver Franchise Bid Proposes ... 258
†Refrigerator—And Now Electra in the Role of Iceman ... 120
†Red Seal Plan and the Adequate Wiring Standards ... 348
Relation of Credit-Manager and Contractor-Dealer ... 179
Relation of Various Distribution Transformer Primary Voltages ... 466
Relays and Relay Application ... 470
Relay Protection as Applied to a Large Transmission Network ... 473
Removal of Commission Control of Utility Rates Sought ... 260
Renewal of Denver Utility's Franchise to be Submitted to Voters in May ... 294
Report is Presented on Meeting of Apparatus Bureau ... 227
Report to Stockholders Issued by General Electric Company ... 378
Request Bids for Cushman No. 1 Transmission Line ... 150
Resale Rate Increase Sought by P. G. and E. Company ... 111
Reservations Now Being Made for Electragists' Annual Meeting ... 601
Results of Tests on Oil-Circuit Breakers of Pacific Coast Manufacture ... 463
*Resume and a Forecast of Commercial Activity ... 91
Resuscitation Medal, Santa Paula Man is Awarded ... 261
Review of the Activities of the Commercial National Section ... 589
Revision of Denver Electrical Code Has Been Started ... 341
*Rocky Mountain Electrical League Holds Fourth Annual Convention ... 296
Rocky Mountain N.E.L.A. Meeting Plans Being Formulated ... 540
Rocky Mountain Region, Chain of Utilities is Formed in ... 375
*Roller Map Mounting Handy for Substation ... 137
Rotor Bars Well Repaired with Silver Solder, Loose ... 249

Page

Ruling Holds Irrigation District Not Public Utility ... 112
*Rural Electrification in California ... 581
Rural Electrification is to Be Discussed at Meeting ... 383

S

Sacramento—
Electrical Society Visits Radio Station 191
*Owner Fully Electrifies Apartments ... 65
Valley Electrical Society Holds Meeting 109
Safe Practices ... 431
Safe Tools and Devices ... 433
Safety Bulletins ... 430
Safety-First Installations for the Electrical Contractor ... 370
Safety Kit Reduces Injury from Burning Clothing ... 19
Safety Rules ... 449
Safety Rules and Safe Practices, Code of ... 430
Sales Campaign, Washington Utility Sells 350 Ranges in ... 538
*Salmon—An Experiment in Lifting Salmon Over High Dams ... 50
*Salt Creek Oil Fields, Utilization of Electricity in the ... 359
Salt Lake League Takes Larger Quarters ... 66
*Salt River Valley Water Users' Association ... 80, 85
Sam Sharp Outsharped ... 372
*San Diego Consolidated Gas & Electric Co. ... 95, 111, 149, 261, 379
San Diego—
Club Elects Officers at Annual Meeting 73
Company Occupies New City Garage Building ... 149
Company's Budget for 1925 is Announced ... 111
Electric Club Holds Two Interesting Meetings ... 383
Electric Club Holds Christmas Celebration ... 33
Electric Club Elects Officers for New Year ... 153
Pool Illuminated with Underwater Floodlights ... 601
San Francisco—
Association Hears National Officer ... 188
Association of Electrical Contractors and Dealers ... 61
*Chronicle ... 330
Contractors Will Hold Annual Dinner 61
San Joaquin Light & Power Corp. ... 4, 26, 67, 85*, 97, 134*, 146, 147, 241*, 351*, 374, 470, 498
San Joaquin Company Announces 1925 Development Plans ... 374
San Joaquin Valley, Power Interchange in 466
Santa Paula Man is Awarded Resuscitation Medal ... 261
*Schedule Maintained on Pit 3 Construction Work ... 186
*Seal Beach Plant Nearing Completion, First Unit ... 259
*Seal Beach Power Station ... 576
Seattle—
Club to Hold Golf Tournament ... 343
Commercial Lighting Rates Reduced ... 149
Electric Club, Golf Tournament Plans Made by ... 383
Firm Gets Everett Wiring Contract ... 179
To be Scene of A.I.E.E. Pacific Coast Convention ... 305
Second—
*Annual Meeting of Northwest Technical Section Held in Spokane ... 337
*Arizona Meter School is Gratifying Success ... 380
Unit is to be Added to Valmont Steam Plant ... 146
Tie-in Proposed Between Washington Companies ... 66
S.E.D. Seeks Pictures of Home Application of Electricity ... 600
Sectionalizing Switch ... 250
Seek Six State Colorado River Compact Ratification ... 222
Seeks Abolishment of Colorado Utilities Commission ... 147
Selling Kitchen Lighting Units in the Spring ... 62
Selling $22 Worth of Appliances to Each Lighting Customer ... 170
Senate of Arizona Rejects the Colorado River Compact ... 223
Senator Promises to Introduce Public Ownership Bill ... 110
Service Conduit Increased from ¾-in. to 1½-in. in 300 Homes ... 329
Service Conduit is Increased in Entire Tract of Homes ... 290
†Service Suggestions Stimulate Interest of Employees ... 121
Shasta Station to be Started in May, Construction of ... 110
Shell Type Transformer Survives Fall to Pavement ... 326
Short Circuit Duty on Kelman Switches at Laguna Bell Station ... 471
Short Circuit Tests on Kelman Type Y15 Oil-Circuit Breakers ... 464
Show-Case Lighting for Contractor, Own Installation Sells ... 329

Page

Silver Anniversay Celebrated by Puget Sound Company 599
Simple and Inexpensive Pole Trailer Easily Made 287
Simple Method of Finding Speed of an Induction Motor 108
*Simple Rule for Connecting Current Transformers 210
Sir Adam Beck Denies Charges Made in Wyer-Walcott Smithsonian Report..... 173
*Sixteen Thousand People Inspect Japan's First Electric Home 204
Skagit—
†Controversy Points Out Fallacy of Municipal Operation 78
Engineer Employed by Aberdeen..... 375
Project 147
†Smiles 3, 67, 113
Smithsonian Institute Reports on Ontario Hydroelectric Commission 171
*Snook O'Brien's Model Diversified Electrical Farm 591
*Soda Development of the Utah Power & Light Company, Details of 123
Sonoma County Contractors Form New Development League 330
*Southern California Edison Co.....
19, 67, 69, 80*, 100, 85*, 86*, 146, 147, 157†, 160*, 161*, 163*, 185*, 200*, 275*, 295, 464, 466, 499, 543*, 554*, 597, 598, 600
*Southern California Power Co. 16
*Southern Colorado Power Co.....86, 261, 296
Southern Sierras Power Company.....
31, 84*, 85*, 95*, 334
Southern—
Delegates Attend Meeting 375
Sierras Power Company Denied Temporary Rate Increase 31
Sierras Company Sues to Get New Valuation 334
†Specialization and the Executives of the Future 233
Standard Electrical Dictionary 266
*Standardized Panel Switchboard for Pumping Plants Urged 252
Standardization of Material and Equipment 522
Stanford Electrical Engineering Fellowship Available 224
Starting Troubles Corrected by Increasing Air Gap 287
State Power Act Has Bearing on Projects in Oregon 147
State-Wide California Electragists Society Formed 263
Station Grounds on the San Joaquin System 493
Station Grounds on Pacific Gas and Electric Company System 495
Stationery and Printing Department Economy 524
Steam Plant at Colorado Springs, Colo..... 30
Steam Electric Generating Stations in the Eleven Western States, 1924-25, Some Additions to 90
Steam Plant Put in Service in Coos Bay, Ore., District 111
*Steam Plant Practice, Latest Development in Pacific Coast 501
Steel—
*Mill, Electricity Simplifies Operation of a Modern 316
Mill at Pueblo, Colo., Will Be Completely Electrified 28
Tunnel Forms Used for Powder Magazine Walls 17
Stimulating Interest in Better Farm Lighting 407
*Stone & Webster 165
Stone & Webster Officials Visit Northwest 341
Stores Department Budget 521
Stores Department Organization..... 526
*Story of Power Told in Motion Pictures.... 165
Street Lighting for Provo, Utah, New..... 339
Street-Lighting System Installed in Small Idaho City 148
†Success of June Bride Campaign Rests with the Industry 310
*Substation Completed at Spokane, Wash., New 60-kv. 364
Suggested Merchandising Plan for Central Stations 389
*Suggestions on Proper Office Lighting 280
Supervision of Materials and Equipment.... 523
†Support Those Who Support Your Industry 234
Switchboard Instruments and Wiring..... 488
*Switch Box Hanger Saves Time in Construction Work. 21
Synchronous Club of Los Angeles Shows Healthy Growth 191
System Calculating Board—Design and Application of 478

T

Tacoma Distribution System Contemplated, Changes in 379
Tacoma's New Municipal Substation for Cushman Project is Announced..... 33
Take a Lesson from the Ten-Cent Store Merchandiser 59
*Taking Electricity to California Farms and Farm Homes 12
Tale of a Cake Contest 341
Talk is Indeed Cheap 287
†Taxing Municipal Employees 39
Teach Illumination at University of Southern California 32
Teaching the Fundamentals of Better Lighting 284, 407
Technical Section—
Bureaus Report on Meetings..... 151
Conclave Held at Fresno, Final..... 265
Conclave Held at San Francisco..... 70
Meetings to be Held in Fresno..... 228
Meeting in Fresno March 25-27, Hold.. 189
Telluride Power Company Files Application to Divert Water from Sevier River..... 150
Ten Little Linemen 19
Tentative Dates Set for New Mexico Convention 267
Tentative Electrical Safety Orders Hearing Dates Set 374
Tentative Program for Forty-Eighth N.E.L.A. Convention Announced..... 536
Tentative Program for N.E.L.A. Convention Announced 115
*Terminal Poles 16
†Test Dam Will Reveal Much Needed Information 159
Testing High-Voltage Insulators in Service 437
Testing Service for Agricultural Pumping Plants 410
Third Annual Radio Exhibition in Los Angeles Sept. 5-12..... 601
*Third Metermen's Course Held at University of Colorado 339
†This is an Age of Progress 121
*Thrust-Bearing Trouble Cured by Greater Oil Pressure 366
Tie Line Near Completion 335
Time-Current Characteristics of Time Relays, Effect of Wave Shape on..... 444
†Trade Association Meetings 1
†Trade Notes .....
38, 76, 118, 156, 194, 232, 308, 346, 386, 606
Transformer Primary Voltages, The Relation of Various Distribution..... 466
Transformer Survives Fall to Pavement, Shell Type 326
Transformers 16
Transmission Line Bids on Transmission Line Material Awarded in Tacoma 28
Transmission Lines 29
Transmission Line Contracts Signed by Tacoma Commission 223
*Transmission Line Pole Nearly Wrecked by Woodpeckers 366
*Transmission System of California, The Interconnected 563
Trestle Supports 17
Trophy Awarded in Los Angeles Jobbers' Bowling League 539
Truck Makers—Cooperative Program Planned by Industrial Truck Makers..... 31
Twenty Years Ago 128, 173, 242
2,000,000-Volt Laboratory to be Installed at Stanford 222

U

Umatilla Rapids 33
*University of Colorado Holds Third Metermen's Course 339
University of Oregon Adds New Course in Utilities 186
University of Southern California..... 32
Unsafe Practice to Wear Safety Goggles Over Eyeglasses 365
Use of Oil in Meter Bearings..... 440
Use of White Pipe is Favored by Standardization Committee 178
Utah—
Company Officials Address Local Commercial Club 191
Division Superintendent and Foremen Hold Conference 32
Engineer Talks on Cutler Project..... 343
Engineering Council Hears President of A.I.E.E. 603
Power & Light Company Acquires Local System 188
*Power & Light Company's Float..... 27
Towns Consider Whiteway Lighting Systems 598
Utilities' Aid Association Holds Annual Meeting 35
*Utah Power & Light Co. .....
27, 32, 30, 35, 80*, 113, 122*, 123*, 143*, 188, 191
Utility Associations Hold Joint Conference in Denver 32
Utility District Seeks Price of Great Western System 66
†Utility Executives of the Northwest, for..... 310
Utility, Five Western Utilities Share in $22,948,000 Budget 261
*Utilization of Electricity in the Salt Creek Oil Fields 359

V

Vaca-Dixon Substation, New Equipment for 297
Vacuum Cleaner Men Meet in Spokane..... 191
*Valley Electrical Supply Co.....26, 58
Value of Western Plants Agreed Upon..... 262
Various Phases of Metering 439
Vertical Reaction Unit of 312 kva. Installed in Canada 176
Vital Message to Contractors in President's Statement 264

W

Page

Washing Machine Directory, Error Noted in 113
Washington—
City May Install Modern Street Lighting System 334
Company's Rates June 15th, To Hold Hearing on 380
Plants to be Electrified 223
Power Sites, Applications Filed on Western 224
Utility, Employees' Manual Contest Closed by 602
Utility Gets Permit for Lower Baker Dam 110
Utility Sells 350 Ranges in Sales Campaign 539
Water Power Budget for 1925 is $1,480,000 188
Water Power Commercial Department Holds Banquet 73
Water Power Company Cuts in 110-kv. Line 379
Water Power Company Plans Duplicate Circuit for Railroad 226
Washington Water Power, Co. .....
29*, 57*, 63*, 66, 73, 80*, 93, 177*, 188, 379
Water—
Appropriation Asked in Oregon..... 34
Heating in California, An Analysis of Domestic 397
Resources Report, Power Generation Suggested in California 601
Rights Suit, Appeal Filed by Edison Comupany in 600
Supply Development Bonds Voted by Aberdeen 297
Water and Power Act Loses by Majority of 431,602 Votes 28
*Water-Boiler, Contractor Makes Electrically Heated 369
†Water-Storage Projects in California, Court Decision Affects Future 158
Way for Temporary Disposal of Hetch Hetchy Power Opened 184
†Way to Top of Ladder is Open..... 2
†Wedding Anniversaries 2
†Welcome N.E.L.A. 541
West Coast Power Company Starts Operations in Northwest 258
Western—
Hydroelectric Power (pictorial)..... 547
Men Attend Meeting of N.E.L.A. Technical Section 189
Plants Agreed Upon, Value of..... 262
Students Win First and Second Prizes 69
Electric Dealer, Pacific Coast Number Issued 600
Western States Gas & Electric Co.....84, 261
Westinghouse—
Company Issues Lighting Bulletin..... 341
Company Organizes Acceptance Corporation 375
Curling Iron, Disk-Type Thermostat Used in 380
Merchandising Center, Mansfield Will Be 375
Plans Dealer Home Lighting Campaign 602
What Classes of Consumers are Good Range Prospects? 245
*What the N.E.L.A. Convention Means to the Pacific Coast 543
†Where Do We Go from Here?..... 196
*White Bluffs-Hanford Land Settlement Experiment 313
White Pipe is Favored by Standardization Committee, Use of 178
Who Shall Pay for Dealer Helps..... 515
*Will You Sell Electrical Gifts for June Brides? 332
Will Investigate Report on Rate Schedules in Denver 223
Winners Announced in Employees' Home Lighting Contest 298
Winners in Smiles Contest are Announced by Committee 67
*Wiring Residences for Electric Service..... 138
Wood Poles Store Bird's Winter Supply of Food 348
Women Within the Organization, Activities of the 534
*Wood Poles Used Successfully for Long-Span Service 288
*Woodpeckers, Transmission Line Pole Nearly Wrecked by 366
Work is Started on Increasing Lake Almanor Capacity 295
†Work of the California Electrical Cooperative Campaign 41
*World's Largest Electric Chick Hatchery... 48
Wrapping Counter Create Additional Sales, How to Make 141
Wynooche Proposed by Utility, Joint Development of 223
Wynooche River Permit May be Canceled by State 150
Wyer Niagara Falls Report, No Apology is to be Made for 335
Wyoming's First Radio Show is Conducted in Cheyenne 182

Y

*Yuba River Power Co..... 84